

# UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,195	06/01/2006	Takao Murakami	060383	2327
	7590 02/01/200 ITOS & HANSON, LL	EXAMINER		
1420 K Street, 1		IMAS, VLADIMIR		
Suite 400 WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			2839	
			MAIL DATE	DELIVERY MODE
			02/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
Office Action Summary		10/581,195	MURAKAMI ET AL.		
		Examiner	Art Unit		
		VLADIMIR IMAS	2839		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address		
A SH WHIC - Exter - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAnsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status		•			
1)⊠	Responsive to communication(s) filed on 16 No	ovember 2007.			
,	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.				
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims				
5)□ 6)⊠ 7)□	Claim(s) <u>1-9</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdray  Claim(s) is/are allowed.  Claim(s) <u>1-9</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or				
Application Papers					
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Examine	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority (	ınder 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachmen	ut(s)				
1) Notice 2) Notice 3) Infor	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	ate		

Art Unit: 2839

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

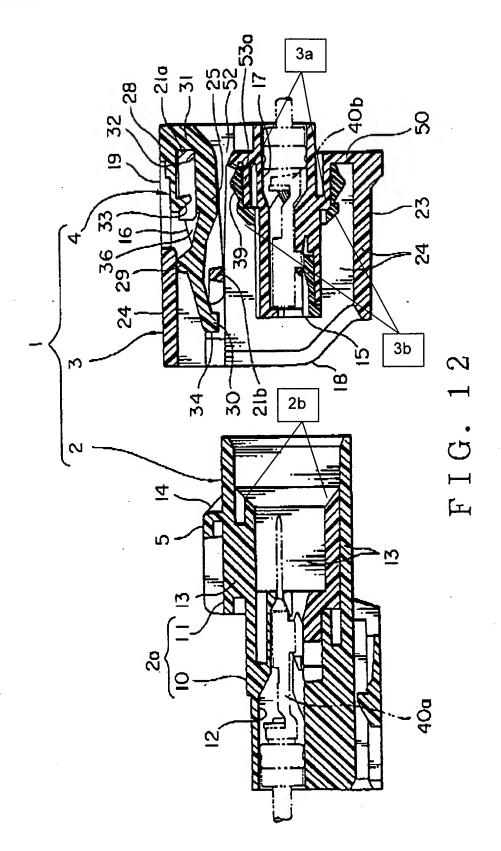
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda (2003/0077939).

Regarding claim 1, Fukuda, fig. 1-22, discloses an electrical connector 1 comprising: a first connector housing 2 and a second connector housing 3 mating with the first connector housing, wherein a tapered surface 2b, 3b is integrally formed on each of the first and second connector housings, the tapered surfaces inclined in the mating direction of the first and second connector housings, the tapered surfaces engaging with each other on complete mating of the first and second connector housings.

Regarding claim 2, Fukuda discloses the each tapered surface is unitarily formed with each of the connector housings.

Regarding claim 3, Fukuda discloses an electrical connector 1 comprising: a first connector housing 2, and a second connector housing 3 mating with the first connector housing, wherein a tapered surface 2b, 3b is integrally formed on one of the first and second connector housings, the tapered surface inclined in the mating direction of the

Art Unit: 2839



Art Unit: 2839

first and second connector housings, the tapered surface engaged with a surface of the other connector housing on mating of the first and second connector housings.

Regarding claim 4, Fukuda discloses the tapered surface is unitarily formed with the one of connector housings.

Regarding claim 5, Fukuda discloses the other connector housing 3 has an inner housing 17 formed with a tapered surface 3b, wherein the tapered surface of the inner housing is engaged in a surface-contact state with the tapered surface 2b of the one connector housing 2.

Regarding claim 6, Fukuda discloses the other connector housing has an inner housing formed with a looseness prohibiting protrusion 3a, wherein the tapered surface of the one connector housing abuts against the looseness prohibiting protrusion on mating the first and second connector housings.

Regarding claim 7, Fukuda discloses the looseness prohibiting protrusion has a tapered surface engaged with the tapered surface of the one connector housing to define a surface-contact state.

Regarding claim 8, Fukuda discloses the inner housing is movable in the connector mating direction and is urged toward the one connector housing by a resilient member 39.

Regarding claim 9, Fukuda discloses the resilient member is a waterproof packing attached in the other connector housing, the waterproof packing closely sandwiched between an outer surface of a peripheral wall of the inner housing and an

Application/Control Number: 10/581,195 Page 5

Art Unit: 2839

inner surface of a peripheral wall of the one connector housing on complete engagement of the first and second connector housings.

### Response to Arguments

3. Applicant's arguments filed on November 16, 2008 have been fully considered but they are not persuasive. The Applicant argues "The surface (3b), referred to in the sketch on page 3 of the Office Action, is on an end of the packing (39) that provides a seal in the male housing (3) and is not integrally formed on the housing as required in the present invention." And also "while there may be some contact between identified tapered surfaces (2b) and (3b) in assembly of the connector, these surfaces do not engage with each other on "complete" mating of the two housings." The Examiner respectfully disagrees. As shown clearly in FIG. 4 of Fukuda, the tapered surfaces of housing 3 are not part of the packing (39) but part of housing elements. And as shown in FIG. 16 of Fukuda (lower part) tapered surfaces of the housing 2 and housing 3 engage with each other (otherwise there is no another purpose of making these surfaces tapered correspondingly each other).

### Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2839

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VLADIMIR IMAS whose telephone number is (571)272-8288. The examiner can normally be reached on 8:00 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T. Patel can be reached on 571-272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Art Unit: 2839

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. I./ Examiner, Art Unit 2839 1/31/2008

- wold

TULSIDAS C. PATEL SUPERVISORY PATENT EXAMINER